

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-007314**Date Inspected:** 13-May-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Sun Wei / Sun Bo**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** TOWER**Summary of Items Observed:**

The Caltrans (CT) Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

ZPMC Weld Procedure Qualification Shop:

The QA Inspector along with Craig Knops of ABF, witnessed Submerged Arc Welding (SAW) from fill pass 71 through the final cover pass (82) in 90 millimeter (mm) thick ASTM A709M GR345 to ASTM A709M HPS485 Steels for ZPMC Procedure Qualification Record HP2009300. The QA Inspector observed that ZPMC Welder Jing Rong ID 070301070 performed the welding under the supervision of Shen Da Ming with ZPMC CWI Huang Wei monitoring and recording weld parameters. The attached photographs provide additional detail.

Outside Yard at Vertical Mill:

The QA Inspector randomly observed that the vertical mill was idle and that no milling was being performed on Lift 1 South Tower Shaft. The QA Inspector did randomly observe several 1 ZPMC helper utilizing an angle grinder on pickups inside at 47.6M Diaphragm.

Heavy Equipment Shop Bay 11:

The QA Inspector randomly observed 2 ZPMC welding personnel utilizing hand held torches with rose buds to

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perform heat straightening operations per ZPMC Heat Straightening Request (HSR) HSR-1(T)-8670, to reduce mill induced distortion in Lift 4 piece marks FD4-10(S) to FD4-12(E).

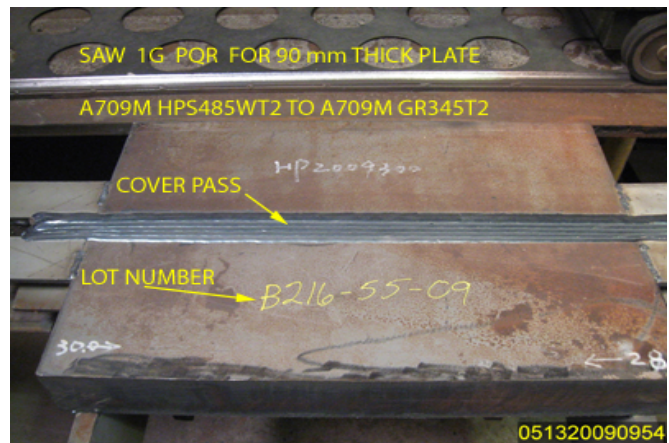
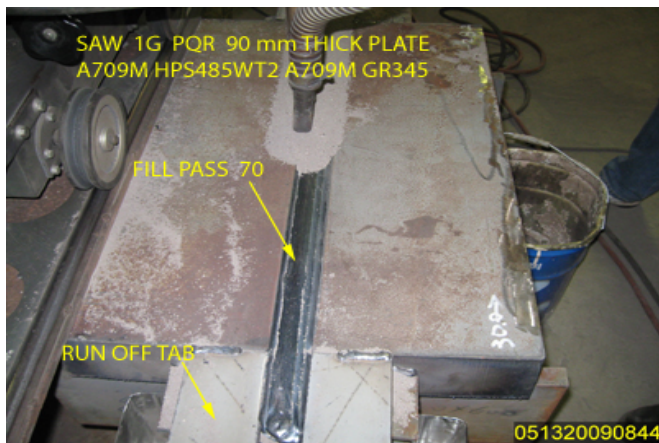
The QA Inspector randomly observed ZPMC welder Chi Guo Zhong ID 040656, utilizing the Shielded Metal Arc Welding (SMAW) Process with ZPMC Weld Procedure Specification (WPS) WPS-345-SMAW-2G (2F)-Repair in the 2G (Horizontal Groove) Position to weld the 500 mm Complete Joint Penetration (CJP) weld at the end of WJ WSD1-FCSA3-2BC-59B attaching a longitudinal stiffener to Lift 3 West Skin Plate C. The QA Inspector randomly observed ZPMC QC monitoring weld parameters. Weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed 2 ZPMC helpers utilizing pencil grinders to shape the copes in the stiffener to upper and lower flanges of 23M West Shear Link Strut WD1-A467-23M-1.

The QA Inspector randomly observed 2 ZPMC helpers utilizing pencil grinders to shape the copes in the stiffener to upper and lower flanges of 43M West Shear Link Strut WD1-A467-43M-1.

The QA Inspector randomly observed 3 ZPMC helpers utilizing pencil grinders to shape the copes in the stiffener to upper and lower flanges of 37M West Shear Link Strut WD1-A467-37M-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 13482570045, who represents the Office of Structural Materials for your project.

Inspected By: Franco,Charlie

Quality Assurance Inspector

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Reviewed By: Clifford, William

QA Reviewer